

ABSTRACT OF THE DISCLOSURE

A polyhedron recognition system that is not easily affected by the camera position and camera range when the shape of a staircase or other polyhedron is recognized from an image obtained by photography, and that can also recognize the shape with good accuracy. In the system, predetermined regions (staircase candidate regions) within the image input from two CCD cameras are selected, and a range image is obtained stereoscopically with the two cameras, while also a candidate region upon the range image obtained based on the selected region is set, and the shape of the staircase or other polyhedron is recognized based on the set range image within the candidate region.